Docket No.: JCLA7301

REMARKS

Present Status of the Application

As stated in the final OFFICE ACTION, the claims 1-15 are still pending because these claims are anticipated by one of three prior art references (i.e.Lee, werker and Walter T. Bax). However, applicant respectfully disagrees the examiner's rejection grounds. Accordingly, the applicant submits the following arguments. For at least the foregoing reason, reconsideration of the claims 1-15 is respectfully requested.

Discussion of "Response to Arguments" in the Office Action

11. Applicant argue that Lee or Werker or Walter T. Bax do not disclose a feedback signal with a feedback frequency and a post-divider. However, Examiner disagrees with the applicant's conclusion because all of them disclose a feedback signal with a feedback frequency and a post-divider. See post-divider (6) in Lee; post divider (13) in Werker and multi modulus divider in Bax, generating a feedback signal with a feedback frequency.

In response thereto, in applicant's opinion, the examiner misconstrued the scope of "a phase digital converter" as claimed in the independent claim 1. Additionally, the phase digital converter is written in a mean-plus-function format in the independent claim 1 and comprised of three limitations; that is, comparing a feedback signal with a feedback frequency and a reference signal at a reference frequency, sampling the compared result at a predetermined frequency and outputting a digital phase adjusting signal. The examiner insistently alleged that "a phase digital

Application No.: 10/058,681 Docket No.: JCLA7301

converter for comparing a feedback signal with a feedback frequency" is disclosed in Lee or Werker or Walter T. Bax. However, the examiner failed to convince the applicant that "a phase digital converter for sampling the compared result at a predetermined frequency" is disclosed in Lee or Werker or Walter T. Bax. In other words, the examiner disregards one limitation of the phase digital converter; that is, it is capable of sampling the compared result at a predetermined frequency. Accordingly, either one of Lee, Werker and Walter T. Bax fails to disclose a phase digital converter for sampling the compared result at a predetermined frequency as claimed in the claim 1. As a result, based on the examiner's inappropriate interpretation of the phase digital converter, the examiner's conclusion that the independent claim 1 is anticipated by Lee or Werker or Walter T. Bax, is accordingly incorrect.

Discussion of the claim rejection under 35 USC 102

3. The Office Action rejected Claims 1,5,9 and 13 under 35 U.S.C. 102(e) as being anticipated over US Patent No. 6,392,496 (Lee et al, hereinafter referred to Lee).

Applicants respectfully disagree and traverse the above rejections based the following arguments. To establish a prima facie case of anticipation, the reference must teach all limitations of the independent claim 1. As discussed above, "a phase digital converter for comparing a feedback signal with a feedback frequency and a reference signal at a reference frequency, sampling the compared result at a predetermined frequency" is not anticipated by Lee because of its failure to disclose a phase digital converter with a limitation of "sampling the compared result at a predetermined frequency." In other words, the phase detector (1), disclosed in Lee, is not

Docket No.: JCLA7301

identical to that of the present invention. As a result, the independent claim1 is not anticipated by Lee; namely, the independent claim1 is patentable over Lee under 35 U.S.C. 102(e).

4. Claims 1,5,6,9,11,13 are rejected under 35 U.S.C. 102(b) as being anticipated over US Patent No. 6,392,496 (Werker et al, hereinafter referred to Werker).

In response thereto, applicants respectfully disagree and traverse the above rejections based the following arguments. To establish a prima facie case of anticipation, the reference must teach all limitations of the independent claim 1. As discussed above, "a phase digital converter for comparing a feedback signal with a feedback frequency and a reference signal at a reference frequency, sampling the compared result at a predetermined frequency" is not anticipated by Werker because of its failure to disclose a phase digital converter with a limitation of "sampling the compared result at a predetermined frequency." In other words, the first phase detector (1), disclosed in Werker, is not identical to that of the present invention. As a result, the independent claim 1 is not anticipated by Lee; namely, the independent claim 1 is patentable over Werker under 35 U.S.C. 102(b).

5. Claims 1, 5, 6, 9, 11, 13 are rejected under 35 U.S.C. 102(a) as being anticipated by Walter T. Bax(IEEE Journal of solid state circuit vol. 36, hereinafter Walter T. Bax).

In response thereto, applicant respectfully traverses the above rejections based the following arguments. To establish a prima facie case of anticipation, the reference must teach all limitations of the independent claim 1. The circuit shown in Fig.3, in Bax, is not a phase lock loop, but a frequency discriminator. So, if the examiner's allegation that the multi modulus divider, as shown in Fig.3, is identical to the post-divider of the present invention is correct, no

Docket No.: JCLA7301

function block, identical to the phase digital converter of the present invention, can be found to execute the function of sampling the compared result at a predetermined frequency, as claimed in the independent claim1. In other words, the independent claim1 is patentable over Bax under 35 U.S.C. 102(a).

Discussion of the claim rejection under 35 USC 103

7. Claims 2, 4, 6, 8, 11,12,14 are rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Berry.

Regarding the objected dependent claims 2, 4, 6, 8, 11, 12 and 14, no matter whether they are conventional, they should be patentable as a matter of law for the reason that they contain all limitation of their patentable base claim 1.

Docket No.: JCLA7301

CONCLUSION

For at least the foregoing reasons, it is believed that all the pending claims 1-15 of the present application patently define over the prior art and are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

4 Venture, Suite 250 Irvine, CA 92618 Tel.: (949) 660-0761

Fax: (949)-660-0809

Jiawei Huang

Respectfully submitted,

J.C. PATENTS

Registration No. 43,330